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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,438	12/08/2003	Martin Schnabel	CM2713Q	2354

27752 7590 04/14/2011
THE PROCTER & GAMBLE COMPANY
Global Legal Department - IP
Sycamore Building - 4th Floor
299 East Sixth Street
CINCINNATI, OH 45202

EXAMINER

MARCETICH, ADAM M

ART UNIT	PAPER NUMBER
3761	

MAIL DATE	DELIVERY MODE
04/14/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/730,438
Filing Date: December 08, 2003
Appellant(s): SCHNABEL ET AL.

William E. Gallagher
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 19 January 2011 appealing from the Office action mailed 19 August 2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1, 3, 4, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schleinz; Robert J. et al. (US 5458590) in view of Costolow; John J. (US (3972854)).

Claims 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schleinz; Robert J. et al. (US 5458590) in view of Costolow; John J. (US (3972854)), further in view of McCormack; Ann Louise et al. (US 6719742).

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

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(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

Examiner maintains the previous grounds of rejection, therefore no new grounds are applied.

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

Document number	Inventor	Publication date
5458590	Schleinz; Robert J. et al.	17 October 1995
3972854	Costolow; John J.	03 August 1976
6719742	McCormack; Ann Louise et al.	13 April 2004
6096412	McFarland et al.	01 August 2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3, 4, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schleinz; Robert J. et al. (US 5458590) in view of Costolow; John J. (US (3972854).

Regarding claims 1, 10 and 11, Schleinz discloses a disposable article (col. 6, lines 28-39);

comprising a liquid pervious topsheet, a liquid impervious backsheet and an absorbent core positioned between said topsheet and said backsheet (col. 6, lines 44-57, Fig. 2, topsheet 22, backsheet 6 and absorbent composite 20);

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wherein said backsheet comprises at least one polymeric film (col. 6, lines 44-52, Fig. 2, liquid impervious film 14); and

at least one nonwoven web formed of fibers (col. 6, lines 44-52, Fig. 2, nonwoven polyolefin fibrous web 8);

wherein said polymeric film and said nonwoven web each have two major surfaces (Fig. 2, film 14 and web 8 each having two major surfaces);

said polymeric film comprises a polymeric film material (col. 6, lines 44-52, Fig. 2, film 14); and

said nonwoven web fibers comprise a polymeric nonwoven web material (col. 7, lines 44-57, fibers of fibrous web);

wherein at least one of said polymeric film material or said polymeric nonwoven web material is color-pigmented by one or more pigments mixed thereinto prior to formation of said polymeric film or said nonwoven web (col. 7, lines 58-64, especially lines 61-64, pigments incorporated into fibers); and

wherein at least one of said polymeric film or said nonwoven web has visually discernible printed designs (col. 6, lines 28-39, printed designs);

said printed designs being provided by printing a pigmented ink onto at least one of said major surfaces of at least one of said polymeric film or said nonwoven web (col. 6, lines 52-57, Fig. 1, printing on outer visible surface 10; col. 7, lines 3-18, especially lines 14-18, printing on nonwoven fibrous web to alleviate need for overlying layer); and

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said polymeric film being joined in an overlaying region across at least part of one of its major surfaces to at least part of an adjacent major surface of said nonwoven web to form said backsheet 6, lines 44-52, web 8 joined to film 14).

Schleinz discloses the invention substantially as claimed, see above.

Additionally, Schleinz forms film 14 and web 8 from the same polyolefins as disclosed in the specification (specification, p. 7, lines 4-15, polyethylenes and polypropylene; Schleinz col. 7, lines 26-32, 40-42). Schleinz analyzes the crockfastness rating or color-retaining ability of a printed substrate and reports CIELAB values (cols. 8-9, lines 62-12, especially lines 2-4). However, the claimed $L^* a^* b^*$ values analyze unprinted material, which is free of ink. Schleinz only analyzes printed samples which include ink, and is silent regarding the $L^* a^* b^*$ values of unprinted material. Therefore Schleinz lacks specific $L^* a^* b^*$ values.

Costolow discloses a method of controlling the color of fiber-grade polypropylene (col. 1, lines 3-17, col. 4, lines 15-20, Fig. 1, extruder 34 producing pellets of fiber-grade polypropylene); and

analyzes their $L^* a^* b^*$ color values (col. 1, lines 44-51, col. 5, lines 1-14).

Costolow analyzes unprinted, ink-free material and returns values overlapping the claimed ranges:

an L value for darkness/lightness-appearance from 10 to 75 or 10 to 65 (col. 5, tables for examples I and II having L values between +52.9 to +56.0);

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an "a" value for red/green- appearance from about -50.0 to about +50.0 or about -35.0 to +25.0 (col. 5, tables for examples I and II having a values between -16.0 to -12.6); and

a "b" value for yellow/blue- appearance from about -50.0 to about +50.0 or about -35.0 to +25.0 (col. 5, tables for examples I and II having b values between +12.6 to +14.8).

Here, Costolow formulates a grade of polypropylene suitable for forming fibers. Both the specification and SchleinZ form a film and nonwoven web with polypropylene. Additionally, SchleinZ calls for adding inorganic pigments that increase opacity (col. 6, lines 11-17, especially lines 11-12, titanium dioxide and pigment white 6) and printing intricate images (col. 6, lines 40-44). Polypropylene having the L* a* b* values within the ranges of Costolow provides high opacity as required to display detailed images. Costolow also controls the color content and desired lightness of a finished product when forming the pellets into nonwoven sheets (col. 1, lines 22-30; col. 2, lines 14-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Costolow as discussed with the fiber-grade polypropylene of Costolow in order to provide an opaque material for printing images as called for by SchleinZ.

Regarding claim 3, SchleinZ discloses an absorbent article wherein one of said two major surfaces of said polymeric film and said nonwoven web is a garment facing surface (col. 6, lines 52-57, Fig. 2, outer visible surface 10); and

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said discernible printed designs are provided by printing on at least one of said garment facing surfaces of said polymeric film or said nonwoven web (col. 7, lines 3-18, especially lines 14-18, printing on outer surface of nonwoven web).

Regarding claim 4, Schleinz discloses an absorbent article wherein:

said backsheet comprises a garment facing layer and a body facing layer (col. 6, lines 44-52, Fig. 2, backsheet 6 having web 8 and film 14); and

said nonwoven web is comprised by said garment facing layer (Fig. 2, web 8);
and

said polymeric film is comprised by said body facing layer (Fig. 2, film 14).

Regarding claim 7, Schleinz and Costolow disclose the invention as substantially claimed, see above. However, Schleinz and Costolow are silent regarding a distance between a rear end edge and a rear core end edge being about 40 mm. The property of distance between edges is interpreted as a result-effective variable, subject to experimentation and testing. A result-effective variable is a parameter which achieves a recognized result. These results are obtained by the determination of optimum or workable ranges of said variable through routine experimentation. The property of distance between edges achieves good fit for a baby through routine experimentation. For example, diapers are provided in sizes suitable for fitting infants of different sizes. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the distance between edges of Schleinz in order to fit infants of an average size. See MPEP 2144.05(II)(A,B). Also see in re Boesch and Slaney, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

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Claims 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schleinz; Robert J. et al. (US 5458590) in view of Costolow; John J. (US (3972854), further in view of McCormack; Ann Louise et al. (US 6719742).

Regarding claim 2, Schleinz and Costolow disclose the invention substantially as claimed, but are silent to the specific opacity value of areas outside printed designs. McCormack discloses a personal care product including diapers (col. 3, lines 17-20); and

selects a material for printing that has opacity from about 55% to 100% in areas outside printed designs (col. 9, lines 43-56, especially lines 43-48, Fig. 3, laminate 30 comprising opaque polyolefin polymeric sheet 42). Examiner interprets the “opaque polymeric sheet” of McCormack as having opacity of 100%, since McCormack does not disclose any departure from a maximum opacity and also calls for a material that creates a more distinct patterned fabric (col. 9, lines 50-56). McCormack selects an opaque sheet to enhance printed designs. That is, an opaque material as taught by McCormack improves opacity for intricate or complex printed images and a background. One would have been motivated to modify Schleinz and Costolow with the 100% opacity of McCormack, since Schleinz calls for high contrast as discussed for claim 1.

Regarding claims 5 and 6, Schleinz and Costolow disclose the invention substantially as claimed, but are silent to the specific percentage of the major surfaces covered with printed designs. The property of covered area percentage is interpreted as a result-effective variable, subject to experimentation and testing. A result-effective

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variable is a parameter which achieves a recognized result. These results are obtained by the determination of optimum or workable ranges of said variable through routine experimentation. The property of covered area percentage achieves masking of waste materials through routine experimentation.

For example, McCormack discloses a method of printing an absorbent article with an embossed design to conceal waste materials (col. 7, lines 30-37, "...employing colors that in effect neutralize the colors within the interior of the article..."). In other words, McCormack selects a coverage percentage is based on the ability of concealing waste materials as seen from the outside of an absorbent article. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the covered area percentage of Schleinz in order to mask a soiled absorbent article. See MPEP 2144.05(II)(A,B). Also see in re Boesch and Slaney, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schleinz; Robert J. et al. (US 5458590) in view of Costolow; John J. (US (3972854), further in view of McFarland et al. (US 6096412).

Regarding claims 8 and 9, Schleinz and Costolow disclose the article as substantially claimed, but lack a half-toning printing process.

McFarland discloses a process of printing absorbent articles with a half-toning printing process (col. 1, lines 14-24 and column 17, lines 52-60). Examiner notes that the process of halftone printing necessarily involves printing with an opaque ink (online

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encyclopedia, p. 1, paragraph 3), which is covered by dots to produce the effect of an additional color (online encyclopedia, p. 1, ¶ 2).

A halftone printing process creates the effect of additional colors for a user (McFarland col. 17, lines 52-60). The practice of printing within an area of a nonwoven web or major surface as claimed falls within the scope of obviousness, as required to print graphics on different areas of a diaper. McFarland provides the advantage of enhanced resolution, in addition to reducing the number of differently colored inks to create the impression of multiple colors (col. 18, lines 55-67, especially lines 55-58).

Schleinz calls for printing multiple techniques including flexography (cols. 3-4, lines 65-5), rotogravure printing (col. 4, lines 51-57) and multiple-color inkjet printing (col. 4, lines 58-65). Here, Schleinz suggests a need for multiple colors, provided by halftone printing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Schleinz and Costolow as discussed with the half-toning process as taught by McFarland in order to enhance graphic resolution and use fewer inks.

(10) Response to Argument

Applicant asserts that one would not look to Costolow for specific Hunter values, since Costolow does not form an absorbent article, backsheet or nonwoven web and instead provides polypropylene pellets. Applicant reasons that Costolow only monitors and sets Hunter values for pellets, based on oxygen regulated in the mixing process. The Examiner disagrees, and notes that Costolow formulates the polypropylene pellets

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to control the color content and desired lightness of a *finished product* (col. 1, lines 22-30; col. 2, lines 14-18). Schleinzi calls for forming a nonwoven polyolefin web from polyolefins including polypropylene and polyethylene (col. 7, lines 26-32). Costolow provides pigmented polypropylene pellets later formed into nonwoven sheets (col. 1, lines 3-17). The references are properly combined to teach the formulation of a polyethylene with a specific Hunter value, wherein the polyethylene sheet may be used in an absorbent article. Therefore, it would have been obvious to modify the unspecified Hunter values of Schleinzi with the specific values of Costolow in order to control background color.

Applicant contends that McCormack fails to remedy the deficiencies of Schleinzi and Costolow, since Schleinzi does not address a problem with regard to a backsheet print substrate translucency. Examiner finds that Schleinzi calls for high contrast between a printed substrate and designs (col. 5, lines 11-19, col. 40-44). McCormack increases the color contrast between embossed regions and a first film layer with opacifying agents (col. 6, lines 39-45). Therefore, it would have been obvious to include the opacifying agents of McCormack in the absorbent article of Schleinzi in order to increase the opacity, especially when printing designs on a colored background.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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/ Adam Marcetich /

Conferees:

/Leslie R. Deak/

Primary Examiner, Art Unit 3761

/LoAn H. Thanh/

Supervisory Patent Examiner, Art Unit 3764